

REMARKS

Claims 1-19 remain in the application. The Examiner indicated on page 2 of the Office Action mailed December 14, 2005, that the application contains 36 claims, but applicant's records indicate only 19 claims are in the case. Claims 14-19 stand withdrawn, but applicant gives the Examiner the authority to cancel these claims by Examiner's amendment upon the allowance of claims 1-13.

Claims 1-13 have been amended to change the word "mat" to web and to more particularly define "good hot strength", and further in the case of claims 8-10, to further limit the type of binder used. These amendments find basis in Examples 1 and 2 and particularly Example 3, the properties of the web of Example 3, and the description of the commercial binder used in Examples 2 and 3. Claims 5-7 have been amended to further limit the amount of bisulphate compound in the binder to at least about 5 wt. percent with basis found in Table 2. Claims 11-13 have been amended to cancel the word "ammonium" and correct antecedent basis.

Claims 1-13 were rejected under 35 USC 112, second paragraph, as being indefinite. Applicant believes the amendments described above respond to the reasons for this rejection and that claims 1-13 are now patentable under 35 USC 112. Applicant respectfully requests the Examiner to withdraw this rejection and to allow these claims.

Claims 1 and 3-13 were rejected under 35 USC 103 as being unpatentable over Taylor et al in view of Lokietek et al. The Examiner states that Taylor et al teaches the claimed invention except for using polymer fibers instead of glass fibers, but that doing so would be obvious to one of ordinary skill in view of the teachings of Lokietek et al. This rejection, particularly in view of the amendments, is respectfully traversed. Taylor et al does not teach or reasonably suggest the claimed invention and Lokietek et al does not correct the deficiencies of Taylor et al.

Taylor et al teach making a fiber glass insulation batts, col. 8, lines 36-37, by adding a bisulphate to a urea modified, phenol formaldehyde resin binder and spraying that binder onto hot glass fibers about 12 inches below a spinning machine used to make the fibers, and

the binder just described. The fiber glass product made in the Examples of Taylor et al are insulation batts, note the "recovery" data and explanation in col. 8, lines 25-26 and 31-34. This is a very different product than the fibrous polymer mats of the present invention, mats having hot strengths suitable for making roofing products in which the mats are subjected to hot asphalt up to about 200 degrees C. while being run through a manufacturing line at high speeds, see Table 1 and page 7 through page 8, line 31. Nothing in Taylor et al teaches or reasonably suggests using phenol formaldehyde binder containing a bisulphate to make polymer fiber mats for making asphaltic roofing products, nor does Taylor et al teach or reasonably suggest using other than a phenol formaldehyde based binder.

Lokietek et al teaches a novel composition containing at least one cationic starchy material and at least one sulfonated starchy material for treating a planer material or board and is totally irrelevant to the invention of Taylor et al and to the presently claimed invention. The portion relied on by the Examiner, col. 1, lines 20-21, merely define what is meant by planer material, and merely states that it includes any paper containing various fibers including polymer fibers. This does not in any reasonable way suggest to one of ordinary skill to modify Taylor et al in the way that the Examiner suggests. It is known that polymer fibers are used to make mats, but this does not lead one of ordinary skill to modify the invention of Taylor et al in the several ways necessary to arrive at the invention of the several present claims, and nothing in either of these references suggests a sufficient hot strength necessary to withstand hot asphalt. For these reasons applicant believes that the claimed invention is patentable under 35 USC 103 and therefore respectfully requests the Examiner to withdraw this rejection and to allow all of the claims.

Claim 2 was rejected under 35 USC 103 as being unpatentable over Taylor et al in view of the teachings of Lokietek et al and further in view of Hummerich et al. The Examiner apparently urges that although the combination of teachings of Taylor et al and Lokietek et al fail to teach or suggest a polymer fibrous mat bound together with any of the binders recited in claim 2, the acrylic copolymeric binder would have been obvious to one of ordinary skill in the art because of the teachings of Hummerich et al. This rejection is respectfully traversed because, as pointed out above, the combination of Taylor et al and Lokietek et al do not teach or reasonably suggest the claimed invention of claim 1 to one of ordinary skill, but also because the teachings of Hummerich et al do not correct the deficiencies of Taylor et al and

Lokietek et al nor do they teach or reasonably suggest the invention of claim 2. Hummerich et al teach that the formaldehyde free binders of their invention can be used to bond fibers together to make webs or mats and prefers to use glass fibers. Hummerich et al teaches that their binders can be used to make fibrous webs for use in making roofing products, but does not teach or suggest that the mats of his invention have the degree of hot strength of the presently claimed mat. Further, Hummerich et al do not teach or reasonably suggest using his binder in combination with a formaldehyde containing binder also containing at least about 2.5 wt. percent of a bisulphate to produce the claimed hot strength, nor is there any teaching in the references that would reasonably lead one of ordinary skill in the art to the presently claimed invention. For these reasons, applicant believes that claim 2 is patentable under 35 USC 103 and respectfully requests the Examiner to withdraw this rejection and to allow claim 2.

The courts and the Board of Appeals have stated in numerous decisions that hindsight reproduction of the invention, using applicants own disclosure to pick parts or pieces of information from two or more references without reasonable incentive provided in the references or other art to do so, is improper. There must be clear evidence of a reason one of ordinary skill would have done so for a 35 USC 103 rejection to be proper, and if unexpected results are alleged and shown, there must be evidence that the results were not unexpected to ignore those results. Applicant cautions the Examiner against using improper hindsight reconstruction and urges the Examiner to recognize the unexpected hot strength achieved in the mats of the claimed invention.

Applicant agrees with the Examiner that the references to Taylor et al '228, Greene, and Bainbridge et al do not teach or reasonably suggest the claimed invention, either alone or in any reasonable combination with or without the references used in the rejections.

Applicants believe that the claims are now in condition for allowance, but if the Examiner believes one or more issues still exist, to expedite disposal of this application the Examiner is respectfully invited to call Applicants' attorney at the number listed below to discuss the issue or issues and a way of removing.

Respectfully submitted,

A handwritten signature in black ink, reading "Robert D. Touslee". The signature is written in a cursive style with a horizontal line underneath.

Attorney for Applicants

Robert D. Touslee
Reg. No. 34,032
Tel. No. 303-978-3927
Fax No. 303-978-2323